

REMARKS

Claims 1-10, 15-20 and 27-30 and 32 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Montpetit in view of Ishi (US. Pat. 4,800,561). Applicants respectfully disagree.

The Examiner states that Montpetit discloses the claimed invention, except for a switch matrix used for connecting antenna elements and demodulators. However, the Examiner asserts that this feature was well known in the art at the time of the invention, as evidenced by Ishi. Applicants respectfully disagree.

As an initial overview, Montpetit discloses bandwidth on demand (BoD) for multiple packet classes, where a terminal can request for specific slots (i.e. time, frequency per bandwidth allocation table) over which it can send data packets. However, the Examiner is now relying on Montpetit as disclosing a satellite resource allocation plan based on results of the determination and the send commands to the payload process in order to modify the payload configuration to satisfy the capacity allocation plan (referring to Fig. 0 and col. 11, lns. 4-27). This is required to configure the satellite digital payload across all demodulators (demods), such that BoD at packet and slot level can operate. However, slot level allocation is different from payload. Montpetit describes a slot by slot level bandwidth allocation process for terminal, and not capacity management—provisioning that supports the bandwidth allocation process. This is the opposite of the Examiner's inherency arguments which states "that it is inherent that if a new bandwidth plan is allocated (in response to a request) the 'payload' will be reconfigured to adapt to the new bandwidth parameters." However, Applicants respectfully submit that this statement is not correct. Indeed, the correct assessment would be to state that if a new bandwidth is allocated to the payload will not be reconfigured to adapt to the new bandwidth parameters—the exact opposite of the Examiner's statement. As stated previously, slots, not payload, are being assigned in Montpetit.

Ishi is cited as evidencing the use of a switch matrix in conjunction with antenna elements for communicating with a plurality of earth stations, and does not disclose the elements lacking in Montpetit, namely modification of the payload configuration to satisfy the capacity allocation plan.

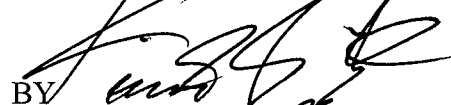
Stated differently, a switch matrix is used to physically connect satellite payload components such as demodulators and antennas. This is significant since the instant application provides capacity management for a configurable payload so that traffic needs can be supported by the correct number of demodulators in specific geographic cells. The switch matrix is configured to implement this connectivity. Once configured, the payload can then support bandwidth on demand where a terminal can ask for slots to send data. In the instant application, unlike the cited art, the number of demodulators (and data rates, etc.) connected to an antenna supporting a cell on the ground so that changing traffic on the ground can be better supported by appropriate payload configuration.

Since the recited structure and method are not disclosed by the applied prior art, either alone or in combination, claims 1 and 10 are patentable. All dependent claims are patentable for at least the same reasons.

The Applicants, therefore, respectfully submit that all pending claims are in condition for allowance, and request that a timely Notice of Allowance be issued in this case. If any fees are due in connection with this application as a whole, the Director is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket number PD-200257 (115426-816) on the account statement.

Respectfully submitted,

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Dated: May 1, 2008